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SYSTEM, METHOD AND APPARATUS FOR SEARCHING GEOGRAPHIC AREA USING PRIORITIZED SPATIAL ORDER

ABSTRACT OF THE DISCLOSURE

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A spatial data search method, system and apparatus for identifying particular data of significance around a reference vector through the spatial data. The method involves determining a reference vector within a spatial region for which spatial data exists, loading a portion of the spatial data including the data around the reference vector into a memory buffer, and searching the spatial data in a prioritized order. The method, system and apparatus have particular utility in searching geographic data for a terrain awareness and warning system ("TAWS") and display in an aircraft. Embodiments of the present invention provide advantages over existing sequential and radial search methods, significantly reducing the processing and calculations required and providing faster alerts to pilots.

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